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TECH CENTER 1600/2900

<110> Citovsky, Vitaly H
Rhee, Yoon

<120> Genetic Assay for Protein Nuclear Transport

<130> 001.00301

<140> US 09/435,274

<141> 1999-11-05

<150> US 60/107,417

<151> 1998-11-06

<160> 17

<170> PatentIn Ver. 2.1

<210> 1

<211> 611

<212> DNA

<213> Unknown Organism

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<223> Description of Unknown Organism:bacterial

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<223> modified bacterial lexA

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acgcggctga agaacatctg aaggcgctgg cacgcaaagg cgttattgaa attgtttccg 180
ggcgcacg cgggattcgt ctgttgcagg aagaggaaga agggttgccg ctggtaggtc 240
gtgtggctgc cggtgaacca cttctggcgc aacagcatat tgaaggtcat tatcaggtcg 300
atccttcctt attcaagccg aatgctgatt tcctgctgcg cgtcagcggg atgtcgatga 360
aagatatcgg cattatggat ggtgacttgc tggcagtgc taaaactcag gatgtacgta 420
acggtcaggt cggtgtcgca cgtattgatg acgaagttac cgttaagggc ctggaaaaac 480
aggcaataa agtcgaactg ttgccagaaa atagcgagtt taaaccaatt gtcgttgacc 540
ttcgtcagca gagcttcacc attgaagggc tggcggttgg gtttattcgc aacggcgact 600
ggctgaaatt c 611

<210> 2

<211> 204

<212> PRT

<213> Unknown Organism

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<223> Description of Unknown Organism:bacterial

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<223> modified bacterial lexA

<400> 2

Met Lys Ala Leu Thr Ala Arg Gln Gln Glu Val Phe Asp Leu Ile Arg
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Asp His Ile Ser Gln Thr Gly Met Pro Pro Thr Arg Ala Glu Ile Ala
20 25 30

Gln Arg Leu Gly Phe Arg Ser Pro Asn Ala Ala Glu Glu His Leu Lys
35 40 45

Ala Leu Ala Arg Lys Gly Val Ile Glu Ile Val Ser Gly Ala Ser Arg
50 55 60

Gly Ile Arg Leu Leu Gln Glu Glu Glu Gly Leu Pro Leu Val Gly
65 70 75 80

Arg Val Ala Ala Gly Glu Pro Leu Leu Ala Gln Gln His Ile Glu Gly
85 90 95

His Tyr Gln Val Asp Pro Ser Leu Phe Lys Pro Asn Ala Asp Phe Leu
100 105 110

Leu Arg Val Ser Gly Met Ser Lys Asp Ile Gly Ile Met Asp Gly
115 120 125

Asp Leu Leu Ala Val His Lys Thr Gln Asp Val Arg Asn Gly Gln Val
130 135 140

Val Val Ala Arg Ile Asp Asp Glu Val Thr Val Lys Gly Leu Glu Lys
145 150 155 160

Gln Gly Asn Lys Val Glu Leu Leu Pro Glu Asn Ser Glu Phe Lys Pro
165 170 175

Ile Val Val Asp Leu Arg Gln Gln Ser Phe Thr Ile Glu Gly Leu Ala
180 185 190

Val Gly Val Ile Arg Asn Gly Asp Trp Leu Glu Phe
195 200

<210> 3
<211> 7
<212> PRT
<213> Simian virus 40

<220>
<223> large T antigen NLS

<400> 3
Pro Lys Lys Lys Arg Lys Val
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<210> 4
<211> 17
<212> PRT
<213> Xenopus sp.

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<223> nucleoplasmin NLS

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<221> VARIANT
<222> (3)..(13)
<223> Residues 3 to 13 in Xenopus laevis are Pro Ala Ala
Thr Lys Lys Ala Gly Gln Ala Lys

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Lys Arg Xaa Lys Lys Lys
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Leu

<210> 5
<211> 9
<212> PRT
<213> Human immunodeficiency virus type 1

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<210> 6
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<212> PRT
<213> Artificial Sequence

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<223> Description of Artificial Sequence:nuclear export signal

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<223> mutated NES of pNEAM10

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Leu Pro Pro Asp Leu Arg Leu Thr Leu
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<210> 7
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<210> 8
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<212> DNA
<213> Artificial Sequence

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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence:primer sequence

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gacggatccc cgggtattcg atctctt

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<212> DNA
<213> Artificial Sequence

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<212> DNA

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<212> DNA

<213> Escherichia coli

<400> 14

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<211> 11

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<400> 15

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<210> 16

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<212> PRT
<213> Artificial Sequence

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BACTERIAL LEX A

<400> 16
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1 5 10

<210> 17
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
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BACTERIAL LEX A

<400> 17
gttaccgtta agggcctgga aaaacagggc aat

33